

# *The Heterodyne*

*Newsletter of the West Valley Amateur Radio Association*

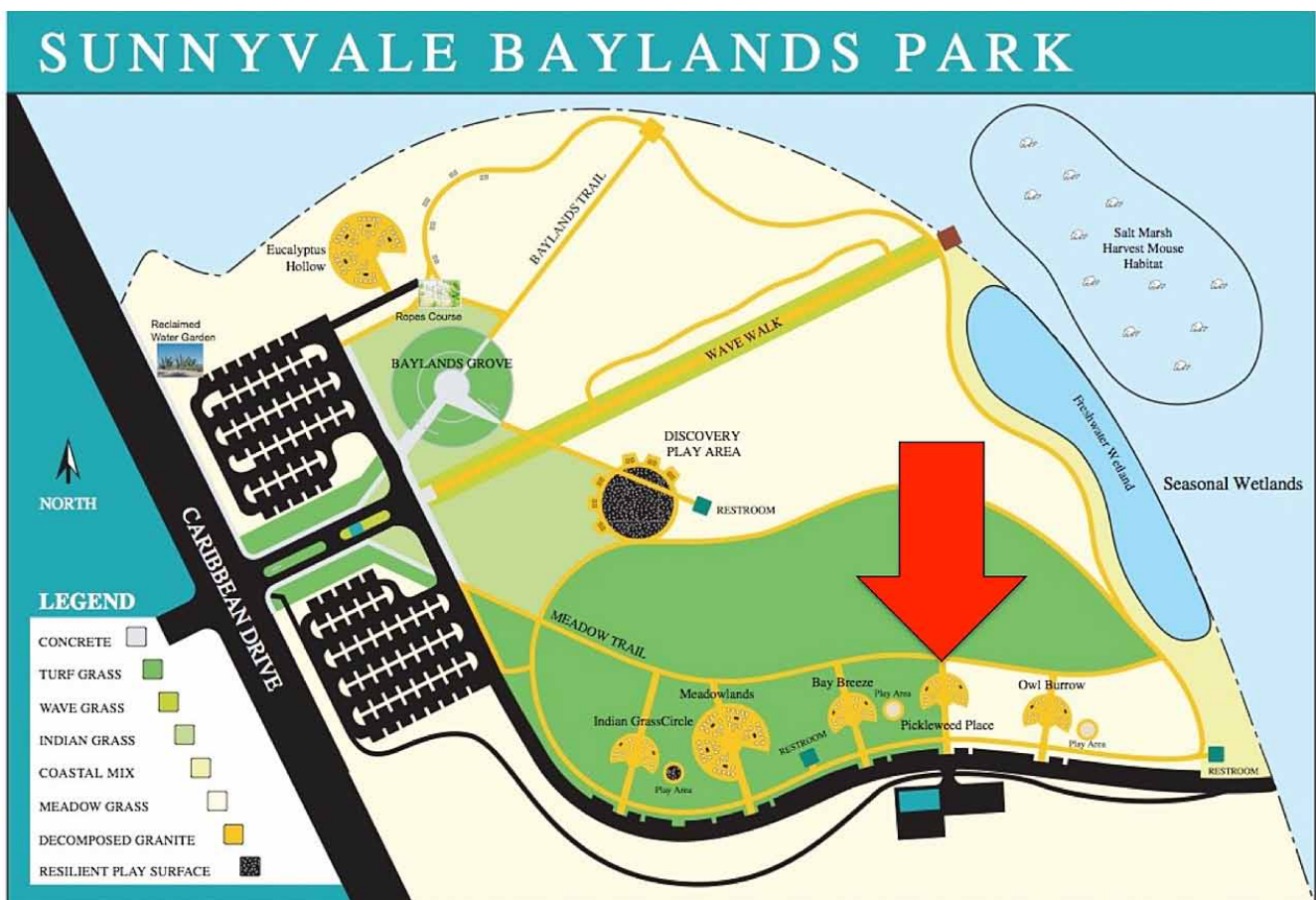
**WVARA Annual BBQ**  
**Saturday August 13**  
**11am - 12:30pm**

At Sunnyvale's Baylands Park  
Pickleweed Place  
Reservation is under "WVARA"

When you get to Baylands  
Park, turn **right** after going  
through the main gate

WVARA Repeaters (W6PIY)		
Band	Frequency	PL
6 Meters	52.580- MHz	151.4 Hz
2 Meters	147.39+ MHz	151.4 Hz
1.25 Meters	223.96- MHz	156.7 Hz
0.70 Meter	441.35+ MHz	88.5 Hz
0.23 Meter	1286.2- MHz	100 Hz

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net control script can be found at [www.wvara.org](http://www.wvara.org) in the "On The Air" dropdown.



## WVARA Annual BBQ

When: 11am – 12:30pm, Saturday, Aug 13, 2022

Where: Sunnyvale's Baylands Park, Pickleweed Place

(When you get to Baylands Park, turn right after going through the main gate.)



There won't be an evening WVARA meetings in July or August. Instead, we are having our annual WVARA BBQ. Our location (see map below, the reservation is under "WVARA") includes multiple tables, grill, an AC outlet, and a covered awning for shade. There is an entry fee per car at Baylands Park, so you may prefer to carpool. We'll have hot charcoal and condiments — please bring your own meat to grill.

— Jim, K6EI

***Welcome to our new members!***

***Jeff Miller, AJ6LG***

***Anne Akbay, AK6BY***

***Al Rusnak, KE6JAC***

***Christian Wirth, KN6USC***

## 2022 Field Day

Field Day is a great opportunity to get outdoors, gain experience assembling equipment in the rough, and operate a station under challenging band conditions. This year the West Valley Amateur Radio Association (WVARA) operated QRP in the 9A Battery category from Mora Hill in Los Altos, California, overlooking the Silicon Valley from an elevation of 500 feet. We had the luxury of lots of solar panels with enough surplus power to run fans in our tents as the temperature on Saturday approached 90 degrees.

We had a Get-On-The-Air (GOTA) station, three HF CW stations, three HF SSB stations, three HF digital stations, and two VHF/UHF stations including one with satellite link capabilities. In spite of being limited to 5 watts, we succeeded in contacting all 50 states and a bit of DX. And there was enough VHF/UHF activity to keep us busy on the 6-, 2- and 70 cm bands including seventeen satellite QSOs. We managed to make roughly 2000 contacts in 24 hours – not bad for 5 watts! Our GOTA station (W6ZZZ) was particularly popular with plenty of drop-in visitors including a good number of kids.

Being outdoors also meant that we got to put up wild-n-crazy antennas that our spouses and neighbors might never allow back home. Antennas on Mora Hill this year included a pair of 4-band (10/15/20/40) yagi antennas for CW and SSB, and a traditional tribander (with 40m driven element resonator) for the digital tent. SSB, CW, and Digital each had a triplexer which enabled sharing each yagi between multiple transmitters. We also had separate 80m dipoles for each mode. GOTA had a trap vertical, an off-center-fed dipole, and VHF antennas.

In order to minimize interference within our site, we took care to have HF transceivers with well-designed front-ends in order to minimize spur transmissions and receiver pumping/desensing. Most of our site's HF stations used Elecraft or Flex transceivers. We likewise set up most of our antennas in a line pointed at the East Coast, so the side lobe rejection helped reduce interference.

Our digital stations benefitted from Bobby's van which came with a self-contained 30 foot telescoping mast. In order to minimize interference between the CW and digital stations, we always locate the digital yagi about 200 feet from the rest of the site. The digital team was able to avoid long runs of coax by installing the digital RF hardware for both of their stations in the van and then running 200 feet of Cat5 Ethernet cable to the main site where the digital tent and the Flex terminals were located.

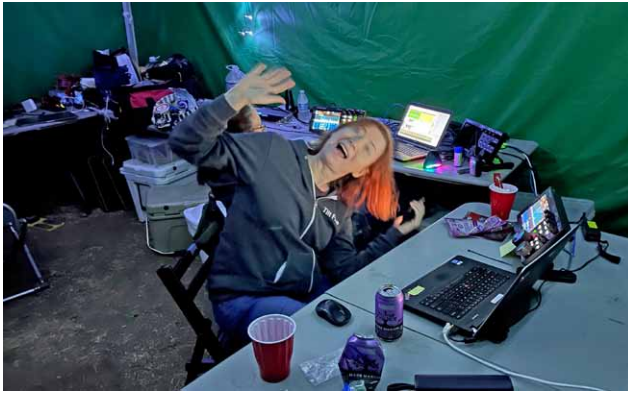
While band conditions were less than stellar – especially when compared to what we've seen other years. According to the ARRL's propagation bulletin, the solar flux during the week of Field Day this year was between 110 and 120 with geomagnetic instability. Argh!

Be sure to let us know if you'd be interested in getting involved with our team in 2023.

– Jim, K6EI



## 2022 Field Day Photos



Thinking about Field Day  
W6ESL

Field Expedient Antennas

Now there is a phrase.

It comes from the US Army and Marine Corps Communications training system.

What it boils down to is using whatever you have at hand to improvise an antenna to help you, the lower echelon communicator in the field, get the message to those that need the information contained therein, and sometimes the whip on your back pack radio isn't up to the job, or it is broken, and you lost the spares kit when you dove into that crater while under fire.

Since I wasn't an Army or Marine Corps communicator humping a back pack squad radio around in the boonies some place, why on earth would I know that phrase.

Well – During the last 6 years of my working life, I was engaged in various trips throughout California, Nevada, and Arizona, on mini-field day type activities with various 'green' radios. Jim, K6EI, joined me towards the end of all that fun.

To do the task assigned to us required us to use antennas of all sorts – and in the early days – I resorted to 'field expedient' antennas as described in various papers and manuals.

So, essentially, it was a field day exercise to get an operational antenna in place using whatever you have at hand. Quickly. Unobtrusively.

Yes - In effect, a Field Day operation. The old simplistic way – wire antennas, trees, etc.

I had a PRC-25 equivalent (FM radio 30-70 MHz, battery powered, maybe 4 watts output) that came with 2 whips: a short 'measuring tape' one, and a taller 'fishing rod' one. Very tough to get a good signal out for any distance. In one of the training manuals, I found the description of a 'half rhombic' antenna. About 100' feet of wire, supported in the middle up to about 30' by any means available, aligned towards the desired recipient. Terminated with a screws or nails into a D-cell, one end of the d-cell attached to the antenna, the other to the counter poise that is needed, and run back to the radio.

It works, it improved the signal and was detected at the other end.

Did you ever say 'this tuner is so good it can tune a wet string to match my radio'...

I remember reading an article where two gents did just that – and it worked – but they had to keep running up and down the length of the string with salted water to keep it working – dried out fast for some reason. Hi Hi

And then there is this – a letter to the editor of QST in July, 1945. Remember, this was in the days of tubes and the ability to peak and dip the tank circuit.

HINDU ROPE TRICK - GI STYLE  
APO 399, c/o PM New York, N. Y.

Editor, QST:

Just received copies of three issues of good old QST. Each time a copy arrives, it is like seeing an old friend - hi!

. . . You ask for some news: Well, I have an example of ham ingenuity. In the early days of the Normandy Invasion I was an radio electrician for a tank company. In the thick of a battle, one tank lost its antenna. I was called up to see what was the trouble or what could be done. As luck would have it, no antenna could be obtained at that crucial moment.

In order to keep the tank in action, I used my noggin and remembered that a rope, if wet, will conduct energy. It was raining cats and dogs anyway. I found a muddy wet tent rope and tied it securely around the top end of the antenna base, strung it to the rear of the tank, draped it over a wooden tool handle and weighted the loose end with a rock. In that way the turret could traverse, and the rope would slide and not short to the chassis. By golly, it *did* work beautifully. I retuned the final and the tank was kept in action for the remainder of the skirmish . . .

Although I am not yet a licensed ham, my Dad, W2BMT, and I have been in amateur radio for years. My radio knowledge has been sole factor in my climb in rank.

- *T/Sgt. Donald Hollister*

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It might be fun to have a fun set up at field day using a field expedient antenna, for old time's sake. You know - just to keep our hand in.

Grin.

# WVARA Net Check-Ins (W6PIY)

Tuesdays at 8:30 PM

Callsign	Name	07/19/22	07/26/22	08/02/22	08/09/22
<b>Total</b>		<b>14</b>	<b>16</b>	<b>13</b>	<b>15</b>
AF6AE	Bill	X	X	X	X
AJ6LG	Jeff		X	X	
AK6BY	Ann		X		
K6VP	Dan	X			
KC6ZKT	Steve	X	X	X	X
KE6JAC	Al	X	X		
KE6VKR	David				X
KF6EMB	Svend		X	X	X
KK6HPF	Ross		X	X	X
KK6VF	Kevin	NET	NET	NET	NET
KN6FGH	Tim	X	X	X	X
KN6QEM	Trajan				X
KN6QEP	Lucas		X		X
KX6B	Dick	X	X		X
N6BTU	Wayne	X			X
W6BG	Max		X	X	X
W6ESL	Tom	X			
W6IA	Mark	X		X	X
W6PK	Phil	X			
W8RJL	Ron	X	X	X	X
WB6JHI	Steve	X		X	
WB6KHP	Dave	X	X	X	X
WR3K	Greg		X		
WR6Z	Dave		X	X	

## FOR SALE

I have for sale a very clean Kenwood TS-940 SAT. This radio has recently been totally gone through by John Klewer, N6AX in Los angeles. There are no issues. It has the built-in Auto Antenna-tuner and also the Voice module. Available for pickup or if interested I will put it on the Air for you to test. Manuel is included. Payments can be arranged for local hams. Asking \$500 Dick Letrich, W6KM. 408/264-0965

## **2022 WVARA Board**

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